

# **DRAFT**

## **Little Prairie**

## **Conservation Area**

### **Ten-Year Area Management Plan**

#### **FY 2015-2024**



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## OVERVIEW

- **Official Area Name:** Little Prairie Conservation Area, # 6316
- **Year of Initial Acquisition:** 1963
- **Acreage:** 342.41 acres
- **County:** Phelps
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**

### A. Strategic Direction

The Little Prairie Conservation Area (CA) provides an upland wildlife area and public recreational opportunities, including fishing and canoeing at William E. Towell (Towell) Lake, bird watching, hiking and hunting. The area will continue to be developed and managed for the protection and enhancement of the area's natural and cultural resources; grassland and woodland wildlife species; the protection and sustainability of aquatic species; and public recreation, to the extent compatible with natural resource management.

### B. Desired Future Condition

The desired future condition of Little Prairie CA is a recreational lake surrounded by healthy woodlands and grasslands.

### C. Federal Aid Statement

This area, or a portion thereof, was acquired and developed with Land and Water Conservation Fund dollars to provide land or facilities for public outdoor recreation.

## GENERAL INFORMATION AND CONDITIONS

### I. Special Considerations

- A. **Priority Areas:** None
- B. **Natural Areas:** None

### II. Important Natural Features and Resources

- A. **Species of Conservation Concern:** None observed.
- B. **Caves:** None
- C. **Springs:** None
- D. **Other:** Heilbrunn Prairie (32 acres); Towell Lake (95.2 acres)

### III. Existing Infrastructure

- 4 parking lots, Americans with Disabilities Act (ADA) accessible
- 6 picnic tables
- 3 privies, ADA accessible

- 1 concrete boat ramp to Towell Lake
- 1 courtesy fishing/boat dock
- 1 fishing dock, ADA accessible
- Several miles of internal service roads
- William E. Towell fishing lake (95.2 acres, 1.1 miles of shoreline)
- 1 fishing pond (0.2 acres)
- 1 fishless pond (0.15 acres)

#### **IV. Area Restrictions or Limitations**

- A. Deed Restrictions or Ownership Considerations:** None
- B. Federal Interest:** This land must provide land/facilities for public outdoor recreation in perpetuity. Federal funds may also be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.
- C. Easements: Electrical**
- D. Cultural Resources Findings:** Yes, records kept with the Missouri Department of Conservation (the Department) Environmental Compliance Specialist. Managers should follow Best Management Practices for Cultural Resources found in the Department Resource Policy Manual.
- E. Hazards and Hazardous Materials:** None observed.
- F. Endangered Species:** None observed.
- G. Boundary Issues:** None

### **MANAGEMENT CONSIDERATIONS**

#### **V. Terrestrial Resource Management Considerations**

Little Prairie CA is comprised entirely of grassland, old field and forest/woodland landscapes. These landscapes are managed to provide habitat for all upland species.

##### **Challenges and Opportunities:**

- 1) Manage all grasslands and woodlands in an early successional stage while providing bare ground for grassland species.
- 2) Maintain warm-season grass density at a level that is useable and beneficial for multiple species, especially for bobwhite quail in the breeding and brood-rearing months.
- 3) Due to multiple hazards to mitigate (i.e., electrical transmission lines, high value developments within a quarter mile, close proximity to retirement communities

and potential smoke impact on Interstate-44), the use of prescribed fire will be limited.

- 4) Control exotic and invasive species in areas that have opened up.

**Management Objective 1:** Manage grassland landscape in multiple successional stages to provide food and cover for wildlife species.

**Strategy 1:** When feasible, multiple burn units will be needed to minimize the smoke hazard. When prescribed fire can be used, it should be used on a three-year rotation. Provide, at any given time, the early successional habitat needed for bare ground, as well as thicker nesting cover in close proximity. Prescribed fire will be used, when practical. Other methods to provide early successional habitat will be considered, when prescribed fire is not practical. (Wildlife)

**Management Objective 2:** Enhance the historic native forb and warm-season grass understory by providing early successional habitat and reducing the basal area in woodlands (i.e., in units with a more closed canopy). Allow timber to grow to larger sizes and uneven ages and conduct a forest inventory in the next five years.

**Strategy 1:** Areas that have had a basal area reduction, using prescribed fire or mechanical techniques, will continue to be thinned with these techniques. (Wildlife)

**Strategy 2:** Areas that were historically open woodlands (based on Ecological Land Types), but are currently a closed canopy, will be thinned mechanically, if prescribed fire has been ineffective. (Wildlife)

**Management Objective 3:** Write prescribed burn plans with very specific parameters that mitigate the main hazards.

**Strategy 1:** Focus prescribed burn plans on high value natural community areas that will benefit the most from prescribed burns. (Wildlife)

**Management Objective 4:** Control or eliminate exotic or invasive species in the area's grasslands and woodlands.

**Strategy 1:** Rotate prescribed burns later into the spring, in areas where tall fescue has been detrimental, as permitted. Reduce the growth potential of the tall fescue for the benefit of warm-season grasses. Burn early in the fall to provide a higher growth potential for the tall fescue. Effectively spray the fescue with a cool-season grass-specific herbicide, when tall fescue is more susceptible. (Wildlife)

**Strategy 2:** Use a broadleaf specific herbicide on exotic or invasive species, particularly, sericea lespedeza and spotted knapweed. Seasonally spot spray these herbicides, when it is most effective. (Wildlife)

## VI. Aquatic Resource Management Considerations

### Challenges and Opportunities:

- 1) Manage Towell Lake for fishing and recreational uses. Towell Lake averages 95 acres of fishable waters throughout the year. It is the closest boatable lake to Rolla and other communities along Interstate 44. Fishing and recreational boat usage is very high throughout the spring and summer months; public fishing occurs most months when the lake is not iced over.
- 2) Manage aquatic vegetation and invasive species at Towell Lake, and their effects on the lake's fishes.
- 3) Minimize the supply and transport of sediments and pollutants into downstream areas.
- 4) Maintain Towell Lake infrastructure.

**Management Objective 1:** Maintain a quality sport fishery for largemouth bass, channel catfish and sunfish through appropriate regulations.

**Strategy 1:** Install natural fish habitat in years when ice cover allows.

**Strategy 2:** Maintain an acceptable level (25 percent to 40 percent) of aquatic vegetation to provide summer cover for small fishes.

**Strategy 3:** Continue to sample fish populations every two to three years.

**Strategy 4:** Survey for invasive aquatic plants and animals that can reduce fishing quality; and provide signage, as appropriate, for aquatic invasive species found in lake.

**Strategy 5:** Maintain largemouth bass and sunfish populations by natural recruitment; maintain channel catfish populations by yearly stockings.

**Management Objective 2:** Manage the area to minimize the supply and transport of sediments and pollutants into downstream areas. Follow *Watershed and Stream Management Guidelines for Lands and Waters Managed by Missouri Department of Conservation* (Missouri Department of Conservation, 2009).

**Strategy 1:** Minimize any adverse impacts to the watershed by observing protection measures during any disturbance in the riparian zones and around the lake. (Wildlife)

**Strategy 2:** Use appropriate herbicides when controlling invasive species in the riparian zones and around the lake. Maintain all existing riparian corridors. (Wildlife)

**Strategy 3:** Consult Fisheries on all work inside the riparian corridors. (Wildlife)

**Strategy 4:** Control erosion along the road and trail system. (Wildlife)

**Management Objective 3:** Maintain lake infrastructure.

**Strategy 1:** Keep the dam free of woody vegetation to minimize water level loss per the Missouri Department of Natural Resources Dam Safety Requirements.

**Strategy 2:** Check the outflow structures yearly to ensure proper functioning.

## **VII. Public Use Management Considerations**

**Challenges and Opportunities:**

Increase public educational opportunities at the area.

**Management Objective 1:** Increase the awareness and success of habitat management on public lands and promote outdoor education.

**Strategy 1:** Work with the Outreach and Education Division to promote outdoor skills activities. Work with the Discover Nature in Schools Program, when appropriate. (Wildlife)

**Strategy 2:** Work with the Master Naturalist program annually, while assisting with various programs including Missouri bird workshops. (Wildlife)

## **VIII. Administrative Considerations**

**Challenges and Opportunities:**

Ensure Department boundaries are marked and visible to public users.

**Management Objective 1:** Keep current Little Prairie CA boundary signs visible and presentable to the public.

**Strategy 1:** Conduct an annual visual survey of all boundary signs. Replace damaged or missing signs. (Wildlife)

## **MANAGEMENT TIMETABLE**

All strategies are considered ongoing.

## APPENDICES

### Area Background:

Little Prairie CA was acquired in 1963 with the intended purpose of providing upland hunting opportunities and fishing opportunities for Missouri residents. An additional 29 acres was donated in 1993 by Ilse Heilbrunn; this portion has been named Heilbrunn Prairie. The 95-acre lake was renamed in 1997 to honor the Missouri Department of Conservation's former director William E. Towell.

### Current Land and Water Types:

Land/Water Type	Acres	% of Area
Open Water	98.20	29
Old Field	98	28
Forest/Woodland	97.6	28
Grassland	32	9
Other: Roads, Fishless Ponds, Parking Lots	19.61	6
<b>Total</b>	<b>342.41</b>	<b>100</b>

### References:

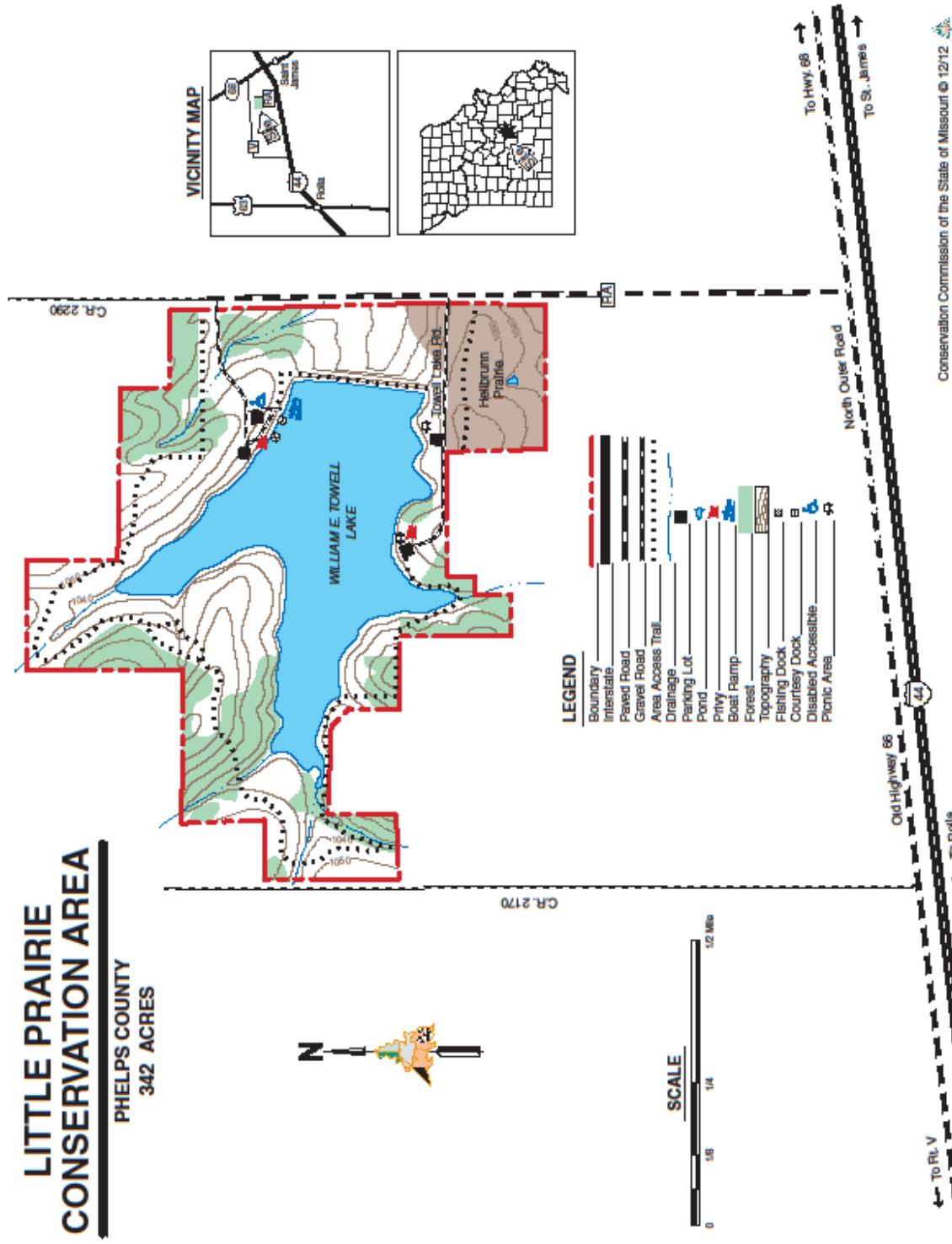
Missouri Department of Conservation. (2009). *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation*. Jefferson City, Missouri: Missouri Department of Conservation. <http://forestkeepers.org/wp-content/uploads/2013/05/Watershed-and-Stream-Management-Guidelines-for-MDC-Land1.pdf>

Nigh, T. A., & Schroeder, W. A. (2002). *Atlas of Missouri ecoregions*. Jefferson City, Missouri: Missouri Department of Conservation.

### Maps:

Figure 1: Area Map  
 Figure 2: Aerial Map  
 Figure 3: Topographic Map

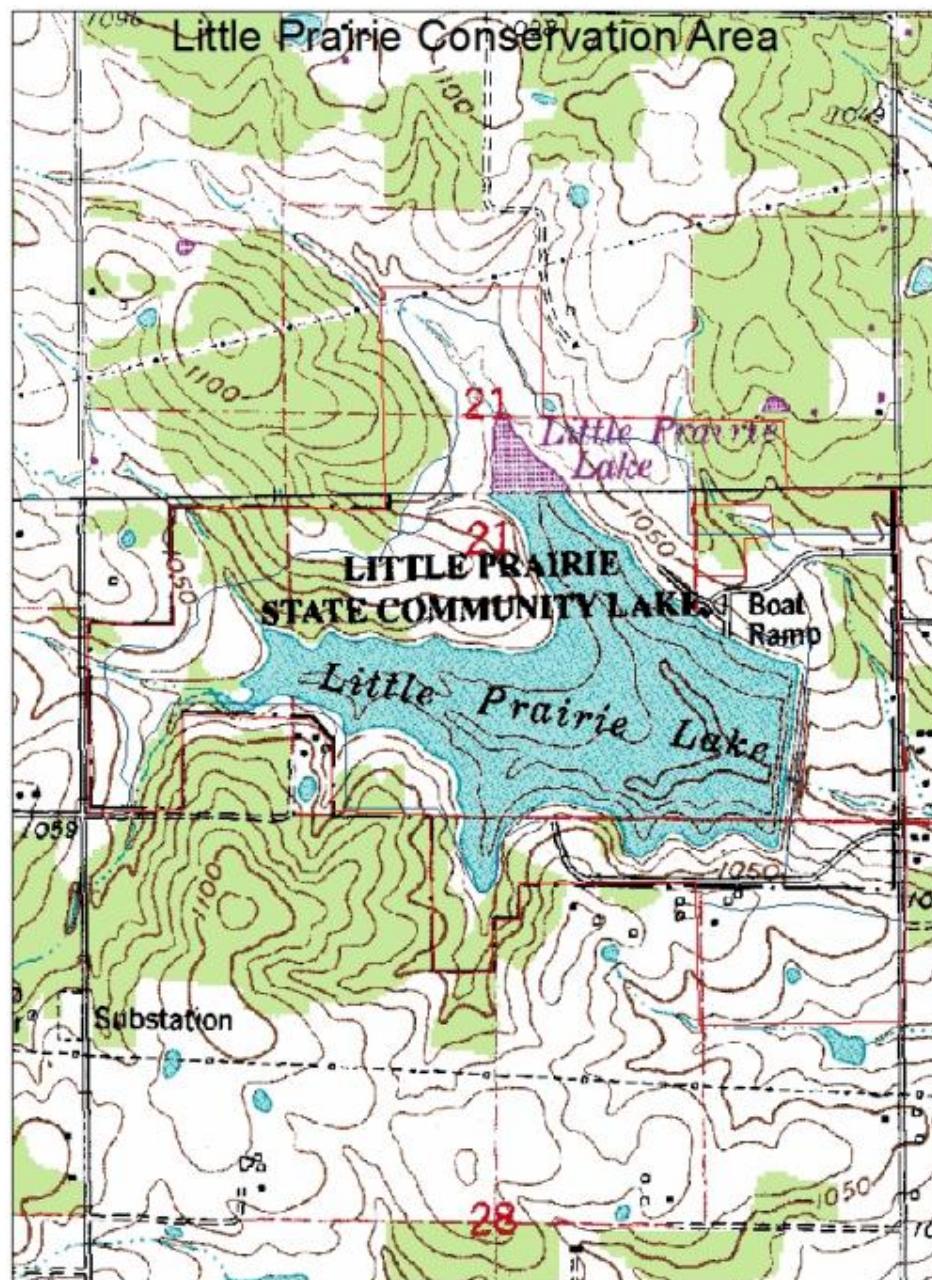
Figure 1: Area Map



**Figure 2: Aerial Map**



**Figure 3: Topographic Map**



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